TECHNOLOGY CENSUS QUESTION OF THE MONTH

Q: "Why do schools have to complete the Census? How are the data used, and how are schools held accountable?"

A: The No Child Left Behind (NCLB) Act and Title II, Part D (Ed Tech Program) have specific goals that states are expected to meet, with two of these expected to be in place **this school year**. Districts are to have 1) technology integrated into core curricula by December 31, 2005, and 2) mechanisms in place to ensure students are technology literate at the end of their eighth grade by June 30, 2006. The Census of Technology (COT) is the mechanism by which the Department collects school data for reporting on the state's progress in meeting these goals to the U.S. Department of Education (ED). Just as important, COT data are used to monitor progress toward meeting the goals and objectives of the state education technology plan. The state plan is aligned to national program goals, while also reflecting the state's vision, goals, and objectives.

The implication for a district or school is there is evidence to support local COT responses. For the state to report data with any confidence, the Department defined key terms so everyone operates under a common understanding of those terms. These technology integration and use definitions set by the Department are provided in the Core Data Manual, under instructions for completing the COT – Screens 30 and 31.

First, is the issue of **education technology standards** (*District Census item 2*). Having local, board-approved standards is important because standards define a common agreement on what ought to be taught and learned, provide guidelines for developing curriculum, and guide teacher and student behavior. The Show-Me Curriculum Standards have technology embedded, and a great many of the districts indicate using the Show-Me technology standards. However, there are only a few technology standards, and they are few broad in scope and not readily defined. For these reasons, the 2002 Missouri State Educational Technology Strategic Plan (METSP) adopted the National Educational Technology Standards (NETS). The International Society for Technology in Education (ISTE) directed the NETS projects that established specific standards for students, teachers, teacher education programs, and school administrators. The NETS for students itemizes expected student behaviors by grade spans.

The eMINTS instructional model and the NETS provide the bases for how the Department defines **curriculum integration** (*District item 6*). Schools teaching from curricula aligned with the state's definition and/or widely implementing the eMINTS instructional model meet the curriculum integration requirement. The eMINTS (enhancing Missouri's Instructional Networked Instructional Teaching Strategies) model consists of extensive professional development and on-going support for teachers as they integrate multimedia technology into inquiry-based, student-centered, and collaborative teaching practices that are standards-based and result in higher levels of student performance.

Education technology standards and technology curriculum integration provide the underpinnings and guide development of **teacher technology skills** (*School Building item 2*), **fully integrated teaching strategies** (*School Building items 3 and 18*), and **student technology literacy** (*District Item 8*). Schools implementing eMINTS, or an eMINTS-like model, would also meet the teacher and student technology literacy standards. The eMINTS comprehensive professional development program for teachers is aligned with the NETS and establishes expected competency levels. In 2005 eMINTS became the first program to

receive the ISTE Seal of Alignment and cited as the only program to meet all 23 of the NETS for teachers.

A district that does not have such a program, or only has eMINTS in a few classrooms, grades or buildings, is advised to examine the state definitions for technology integration and use (as provided in the Core Data Manual), and compare the state descriptions with district curriculum guides, classroom syllabi, prevailing instructional practices, as well as expected student behaviors and work products. Should a district be asked to provide documentation that supports COT responses, evidentiary documents would include teacher or professional development instructor observations, teacher and/or student work artifacts or portfolios, survey results, test scores, course grades, and the like.

There is a multitude of online resources and materials to help schools collect local data on teacher and student use of technology to enhance teaching and learning. Schools in the mid-west region should be familiar with Profiler, an online survey service provided through the High Plains Regional Technology in Education Consortium (HPR*TEC), and TAGLIT, the survey used in Missouri's Technology Leadership Academies. The State Educational Technology Directors Association (SETDA), with assistance from the Metiri group and support from the U.S. Department of Education, created the PETI tools – Profiling Educational Technology Integration: Resources for Assessing Readiness and Use. Missouri schools can take note that SuccessLink recently began work to automate data collection and reporting for the PETI district, school, and teacher PETI surveys.

Many schools have been looking into testing to "certify" student and/or teacher technology literacy. While there is no federal or state mandate requiring literacy examinations, there has been a lot of press in the last two to three years about testing services, technology businesses, and education technology organizations creating literacy tests for K-12 use. Such schools may be interested in the Assess 21 resource that provides a database of instruments assessing "21st century skills", including technology literacy. See: http://www.21stcenturyskills.org/assess21/.